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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN FRANKLAND¹

Appeal 2016-002260
Application 13/022,270
Technology Center 2400

Before MICHAEL J. STRAUSS, DANIEL N. FISHMAN, and
JAMES W. DEJMEK, *Administrative Patent Judges*.

FISHMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1–34. We have jurisdiction over the pending claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellant identifies Qualcomm Incorporated as the real party in interest. App. Br. 2.

THE INVENTION

Appellant's invention is directed to "allow[ing] coexistence between two wireless communication systems" in a wireless communication system.

Spec. ¶ 1.

Independent claim 1, reproduced below, is representative:

1. A method for implementing a system solution for coexistence between a first service and a second service comprising:

accepting a first service selection for a first wireless cellular system on a mobile terminal;

performing a data transport using the first service selection on the mobile terminal;

accepting a second service selection for a second wireless cellular system on the mobile terminal, wherein a channel of the second wireless cellular system used by the second service interferes with a channel of the first wireless cellular system used by the first service;

implementing a suspension of the data transport using the first service selection on the mobile terminal;

redirecting the data transport using a different wireless cellular system that permits the first service to coexist with the second service;

and clearing said suspension, wherein said clearing is conditioned on completion of the redirected data transport.

THE REJECTIONS

Claims 1–4, 6–14, 16–24, and 26–34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jaakkola et al. (US 2008/0151845 A1; June 26, 2008) ("Jaakkola"), Sebire (US 2009/0268690 A1; Oct. 29, 2009), Xhafa et al. (US 2009/0040937 A1; Feb. 12, 2009) ("Xhafa"), and

Ling et al. (US 2012/0069817 A1; Mar. 22, 2012; Mar. 22, 2012 (claiming priority to a provisional application filing Sept. 20, 2010)) (“Ling”).

Final Act. 3–14.

Claims 5, 15, and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Jaakkola, Sebire, Xhafa, Ling, and Sawyer (US 2007/0123258 A1; May 31, 2007). *Id.* at 14–15.

ANALYSIS

Only those arguments actually made by Appellant have been considered in this Decision. Arguments that Appellant did not make in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv). We are not persuaded by Appellant’s contentions of Examiner error (App. Br. 6–12; Reply Br. 2). We adopt as our own the findings and reasons set forth by the Examiner in the action from which this appeal is taken (Final Act. 2–18) and as set forth by the Examiner in the Answer (Ans. 2–8). However, we highlight and address specific arguments and findings for emphasis as follows.

Accepting Different Service Selections

Independent claim 1 recites, in pertinent part, “accepting a first service selection for a first wireless cellular system on a mobile terminal; accepting a second service selection for a second wireless cellular system on the mobile terminal . . . ; [and] redirecting the [first wireless cellular system’s] data transport using a different wireless cellular system.” The Examiner finds Jaakkola’s vertical handover teaches or suggests these disputed limitations. Final Act. 3–4 (citing Jaakkola ¶¶ 49–52); *see also* Ans. 3–5. Appellant argues Jaakkola’s vertical handover, involving only an

unlicensed module access (“UMA”) connection active in a wireless local area network (“WLAN”), does not teach different service selections associated with the disputed limitation. App. Br. 9.

Appellant’s contentions are unpersuasive of Examiner error. Paragraph 52 of Jaakkola recites “[w]hen a user makes a Bluetooth® Inquiry with a wireless device (STA) while in an active UMA connection (either in a call or transferring other data), the STA should make a vertical handover (HO) from the WLAN to another UMA compatible system such as GSM or UMTS.” The Examiner finds, and we agree, Jaakkola’s WLAN-based and GSM/UMTS-based service sessions each provide a service selection for a mobile terminal to operate. Ans. 3–4. We further agree with the Examiner’s conclusion that, “[t]he WLAN[-]based service and the compatible GSM or UMTS are two different wireless systems that provide different types [of] wireless services.” *Id.* at 4. Therefore, Jaakkola’s disclosure of a vertical handover teaches or suggests accepting a first service selection for a WLAN-based service session (the claimed “first wireless cellular system”) on a mobile terminal, accepting a second service selection for a GSM/UMTS-based service session (the claimed “second wireless cellular system”) on the mobile terminal, and redirecting a call or data transfer (the claimed “data transport”) using the GSM/UMTS-based service session (the claimed “different wireless cellular system”).

Interfering Channels

Independent claim 1 further recites, in pertinent part, “wherein a channel of the second wireless cellular system used by the second service interferes with a channel of the first wireless cellular system used by the first

service.” The Examiner finds Jaakkola discloses a second wireless system interfering with a first wireless system (Final Act. 4) and finds Sebire, in combination with Jaakkola, discloses the first and second wireless systems each having a respective channel (*id.* at 5). Appellant asserts Jaakkola teaches WLAN and Bluetooth® interfere with each other because they operate on a same frequency band. App. Br. 10 (citing Jaakkola ¶ 10). Appellant argues GSM/UMTS do not interfere with either WLAN or Bluetooth® because the purpose of Jaakkola’s handover from WLAN to GSM/UMTS is to ensure the continuity of the WLAN session during a Bluetooth® Inquiry. *Id.* at 10 (citing Jaakkola ¶¶ 27, 52). Appellant concludes the Examiner erred in finding Jaakkola teaches that WLAN and GSM/UMTA interfere with each other. *Id.*

We are not persuaded the Examiner erred because Appellant’s arguments are not responsive to the Examiner’s rejection. Specifically, the Examiner finds, and we agree, Jaakkola teaches, in paragraphs 43 and 64, *inter alia*, “concurrent communication of two or more interfering radio subsystems” wherein “the operation of the first wireless subsystem is interrupted/interfered when the second wireless subsystem is handed over to service the mobile terminal.” Ans. 4.

Figure 2b of Jaakkola is illustrative and is reproduced below:

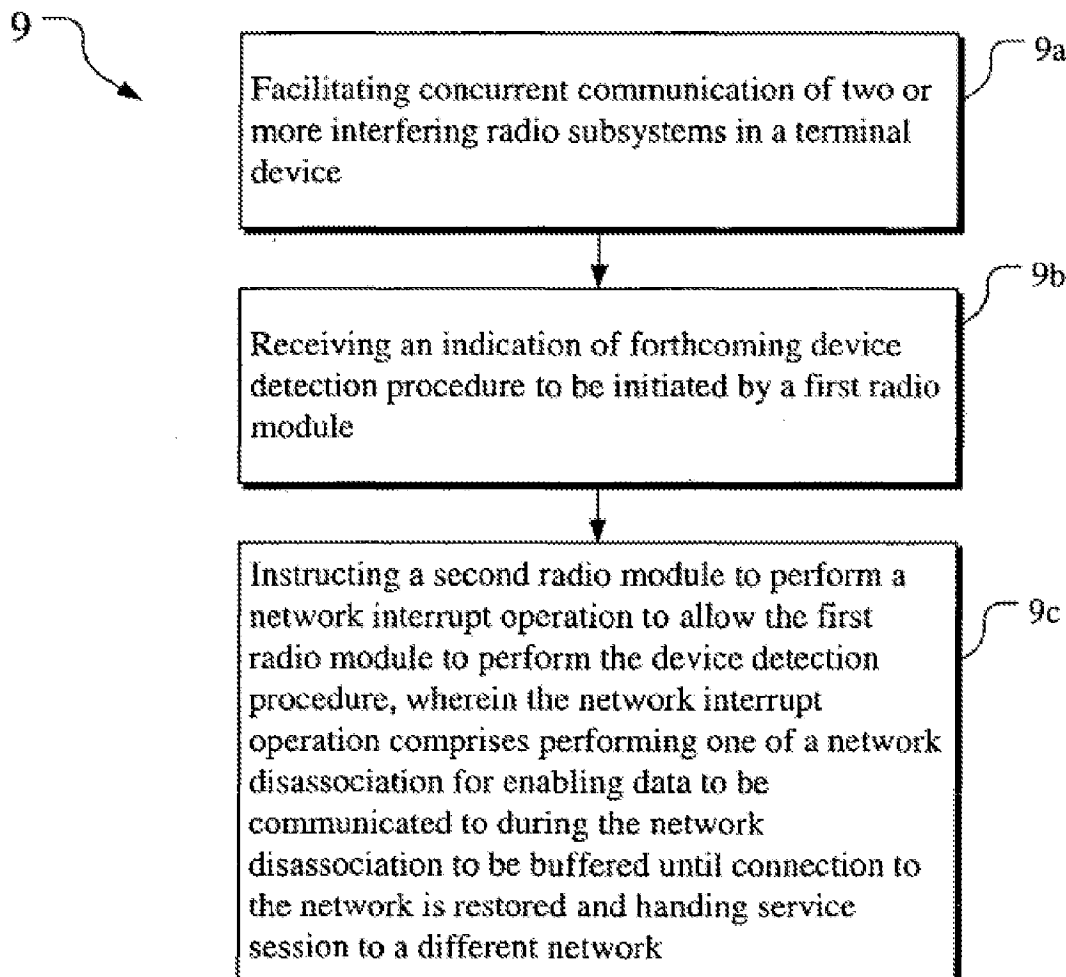


Figure 2b

Figure 2b illustrates a flowchart “for implementing the inventive method according to some embodiments.” Jaakkola ¶ 43. As shown in Figure 2b, item 9A is directed to “[f]acilitating concurrent communication of two or more interfering radio subsystems in a terminal device.”

Paragraph 64 of Jaakkola teaches radio subsystem modules including a BT radio subsystem module, a WLAN radio subsystem module, and a GSM/UMTS radio subsystem module. Appellant’s arguments are directed

to “interference” as it relates only to overlapping radio-frequency bands of each wireless system. Broadly but reasonably interpreted, the claimed “interference” is not so narrowly restricted. Thus, we agree with the Examiner that Jaakkola teaches or suggests interference between a GSM/UMTS-based service session (the claimed “second wireless cellular system used by the second service”) and a WLAN-based service session (the claimed “first wireless cellular system used by the first service”).

Appellant further argues the Examiner’s reliance on Sebire is misplaced because Sebire is not directed to any problem involving an interference between two active sessions, much less using a handoff to avoid the interference. App. Br. 10 (citing Sebire ¶ 28). Appellant concludes Sebire “has nothing to add to Jaakkola’s use of a vertical handoff to avoid interference between two active sessions.” *Id.* We remain unpersuaded of Examiner error because Appellant’s contentions are not responsive to the rejection as articulated by the Examiner. The Examiner relies on *the combination* of Jaakkola and Sebire for the teaching or suggestion of the limitation at issue. Final Act. 3–6; Ans. 5–6. Specifically, as discussed *supra*, the Examiner finds Jaakkola, not Sebire, teaches accepting a first and second service selection for a first and second wireless system on a mobile terminal, wherein the second wireless system used by the second service interferes with the first wireless system used by the first service. Final Act. 3–4 (citing Jaakkola ¶¶ 43, 49–52; Figure 2B); *see also* Ans. 3–4 (citing Jaakkola ¶ 64). The Examiner further relies on Sebire for teaching *a channel* for first and second wireless *cellular* systems. Final Act. 5 (citing Sebire ¶¶ 10, 60, 61). Thus, the Examiner finds, and we agree, the combination of Jaakkola and Sebire teaches accepting a first and second service selection for

a first and second wireless *cellular* system on a mobile terminal, wherein *a channel* of the second wireless *cellular* system used by the second service interferes with *a channel* of the first wireless *cellular* system used by the first service. By contrast, Appellant’s arguments improperly attack the references individually rather than addressing what the proposed combination teaches or suggests. *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986).

Permitting First and Second Services to Coexist

Independent claim 1 further recites, in pertinent part, redirecting the data transport to a different system “that permits the first service to coexist with the second service.” As discussed *supra*, the Examiner finds Jaakkola discloses the step of redirecting (Final Act. 4) but relies on Xhafa, in combination with Jaakkola, for disclosing the coexistence of multiple wireless systems (*id.* at 6). Appellant contends the Examiner erred in finding Xhafa teaches avoiding interference between first and second services associated with first and second cellular systems by using a different cellular system that permits coexistence of the first and second services. App. Br. 10–11. In particular, Appellant argues Xhafa’s scheduling, which avoids interference between two conflicting links, explicitly leads one of ordinary skill in the art away from interference. *Id.* (citing Xhafa ¶¶ 55–58). Appellant further argues Xhafa does not teach redirecting an ongoing voice call to a different wireless system because Xhafa solves the mutual interference issue without redirecting any connection. *Id.* at 11.

We are unpersuaded of Examiner error. The Examiner finds, and we agree, *the combination* of Jaakkola and Xhafa teaches or suggests this disputed limitation. Final Act. 2–4; Ans. 2–6. Specifically, the Examiner relies on Jaakkola, not Xhafa, to teach redirecting the data transport using a different wireless system. Final Act. 4 (citing Jaakkola ¶¶ 49, 52). The Examiner further relies on Xhafa, in combination with Jaakkola, to teach the coexistence of different wireless systems using a scheduler. *Id.* at 6 (citing Xhafa ¶¶ 55–57). Thus, the Examiner finds, and we agree, the *combination* of Jaakkola and Xhafa teaches redirecting the data transport using a different wireless system that permits the first service to coexist with the second service. As above, Appellant’s arguments improperly attack the references individually rather than addressing the combined teachings. Furthermore, a prior art reference does not teach away from the claimed subject matter unless the prior art reference criticizes, discredits, or otherwise discourages the solution claimed. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009). Appellant has not persuaded us Xhafa sufficiently discourages, discredits, or criticizes interference between two conflicting links to thereby teach away from the proposed combination.

Independent claim 1 further recites, in pertinent part, “clearing said suspension, wherein said clearing is conditioned on completion of the redirected data transport.” The Examiner finds Ling, in the proposed combination, teaches or suggests this disputed limitation. Final Act. 7. Appellant argues the Examiner erred in finding Ling teaches this limitation asserting Ling teaches suspending a packet switched service while user equipment (UE) is in circuit switched fallback (CSFB). App. Br. 11 (citing Ling, Fig. 3). Appellant further asserts, if packet switched connections were

handed over from 3GPP to an available non-3GPP, the packet switched connections are handed back to 3GPP upon completion of the circuit switched session. *Id.* at 11 (citing Ling ¶ 76, Fig. 3). Appellant argues the “resumption of suspended packet switched service is thus conditioned on completion of the circuit switched session, not completion of the packet switched transport that was handed over from 3GPP to non-3GPP.” *Id.*

We are unpersuaded of Examiner error. The Examiner finds, and we agree, *the combination* of Jaakkola and Ling teaches or suggests this disputed limitation. Final Act. 2–4; Ans. 2–6. As above, Appellant’s argument improperly attacks the teachings of the references individually rather than the combined teachings. Specifically, the Examiner relies on Jaakkola’s vertical handover “that suspends the first wireless cellular system [and] redirect[s] the data transport from the first wireless cellular system to another wireless cellular system.” Ans. 7; *see also* Final Act. 4 (citing Jaakkola ¶ 47). The Examiner further relies on Ling to teach clearing an E-UTRAN suspension upon a UE deciding to return to E-UTRAN, wherein the clearing is conditioned upon the completion of a CS service. Final Act. 7 (citing Ling ¶¶ 61, 62, 76); *see also* Ans. 7–8. Thus, the Examiner finds the combination of Jaakkola and Ling teaches clearing Jaakkola’s first wireless system suspension that is conditioned on completion of Jaakkola’s data transport from the first wireless system to another wireless system.

Lastly, Appellant generally argues the Examiner’s combination of Jaakkola, Sebire, Xhafa, and Ling merely represents several imaginary factual findings “manifestly not 35 USC [§] 103 ‘prior art’” (App. Br. 7) that allegedly arrive at the claimed invention. App. Br. 7–9; Reply Br. 2. Specifically, Appellant refers to the Examiner’s proposed combination as

“imaginary constructs.” Reply Br. 2. Appellant concludes the Examiner’s combination of Jaakkola, Sebire, Xhafa, and Ling “does not comport with the statutory requirement to show that the differences between the prior art and the claimed invention are such that the claimed invention would have been obvious.” App. Br. 8 (emphases omitted).

We are unpersuaded of Examiner error. The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. *See In re Young*, 927 F.2d 588, 591 (Fed. Cir. 1991); *see also In re Keller*, 642 F.2d 413, 425 (CCPA 1981). “A claim can be obvious even where all of the claimed features are not found in specific prior art references, where ‘there is a showing of a suggestion or motivation to modify the teachings of [the prior art] to the claimed invention.’” *Ormco Corp. v. Align Technology, Inc.*, 463 F.3d 1299, 1307 (Fed. Cir. 2006) (quoting *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356 (Fed. Cir. 2000)).

Appellant has not presented sufficient evidence or reasoning in support of their contention that the Examiner’s combination of references fails to comport with requirements of 35 U.S.C. § 103(a). Thus, we agree with the Examiner that the skilled artisan would have been “able to fit the teachings of multiple patents together like pieces of a puzzle” because the skilled artisan is “a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. 398, 420–21 (2007). Therefore, we find unpersuasive of error Appellant’s contention that the combination of Jaakkola, Sebire, Xhafa, and Ling is improper.

In view of the above discussion, we are not persuaded the Examiner erred by finding the combination of Jaakkola, Sebire, Xhafa, and Ling

teaches or suggests the limitations of claim 1. Appellant presents similar arguments regarding independent claims 11, 21, and 31 (App. Br. 7–12) and, for the same reasons as claim 1, we are not persuaded of Examiner error. Thus, we sustain the rejection of independent claim 1 and, for the same reasons, we sustain the rejection of independent claims 11, 21, and 31 together with the rejection of dependent claims 2–10, 12–20, 22–30, and 32–34, not separately argued with particularity. App. Br. 12.

DECISION

We affirm the Examiner’s decision to reject claims 1–34.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED